IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	:	Adnan M.M. Mjalli et al.
Ser. No.	:	10/777,471
Filing Date	:	February 2, 2004
For	:	SUBSTITUTED AZOLE DERIVATIVES AS THERAPEUTIC AGENTS
Examiner	:	Unknown
Art Unit	:	1615
Atty. Docket	:	TTP 2002-07

Mail Stop: **AMENDMENT**
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. § 1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08a. One copy of each reference, other than, US Patents or US Patent Publications, is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

☒ 1. This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No certification or fee is required.

☐ 2. This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection or Notice of Allowance.

☐ a. I hereby certify that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).

☐ b. I hereby certify that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my

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☐ c. Please debit Deposit Account No. 50-3216 in the amount of $_____ in payment of the fee under 37 C.F.R. § 1.17(p). Two duplicate copies of this paper are attached.

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Respectfully submitted,

Date: Nov. 15, 2004

Samuel B. Rollins
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11-16-04

IFW

EXPRESS MAIL CERTIFICATE

"Express Mail" Label No.	:	EV 507590115 US
Serial No.	:	10/777,~~421~~ 471
Applicant(s)	:	Adnan M.M. Mjalli et al.
Filing Date	:	February 2, 2004
Title:	:	SUBSTITUTED AZOLE DERIVATIVES AS THERAPEUTIC AGENTS
Examiner	:	Unknown
Group Art Unit	:	1615
Type of Document(s)	:	Express Mail Certificate; Transmittal Form; Information Disclosure Statement; PTO/SB/08A; and Return Postcard

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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission: 26

Application Number	10/777,471
Filing Date	02/04/04
First Named Inventor	Adnan M.M. Mjalli
Art Unit	1615
Examiner Name	Unknown
Attorney Docket Number	TTP 2002-07

ENCLOSURES *(check all that apply)*

- ☐ Fee Transmittal Form
  - ☐ Fee Attached
- ☐ Amendment / Reply
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- ☒ Information Disclosure Statement
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Signature	Samuel B. Rollins		
Printed Name	Samuel B. Rollins		
Date	Nov. 15, 2004	Reg. No.	52,180

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 20

Complete if Known	
Application Number	10/777,471
Filing Date	02/04/04
First Named Inventor	Adnan M.M. Mjalli
Art Unit	1615
Examiner Name	Unknown
Attorney Docket Number	TTP 2002-07

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No.[1]	Document Number Number - Kind Code[2] (*if known*)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	TR-190	US- 20020002199	01/03/2002	Jeppesen et al.	
	TR-191	US- 20020009762	01/24/2002	Flint et al.	
	TR-192	US- 20020035137	03/21/2002	Liu et al.	
	TR-193	US- 20020072516	06/13/2002	Liu et al.	
	TR-194	US- 20020099073	07/25/2002	Andersen et al.	
	TR-195	US- 20020138862	09/26/2002	Kennedy et al.	
	TR-196	US- 20020169157	11/14/2002	Liu et al.	
	TR-197	US- 20020183518	12/05/2002	Mjalli et al.	
	TR-198	US- 20030064979	04/03/2003	Hansen et al.	
	TR-199	US- 20030069267	04/10/2003	Moller et al.	
	TR-200	US- 20030108883	06/12/2003	Rondinone et al.	
	TR-201	US- 20030114703	01/19/03	Leblanc et al.	
	TR-202	US- 20030120073	06/26/2003	Seto et al.	
	TR-203	US- 20030144338	07/31/2003	Matsumoto et al.	
	TR-204	US- 20030153756	08/14/2003	Guertin et al.	
	TR-205	US- 20030170660	09/11/2003	Sondergaard et al.	
	TR-206	US- 20030180827	09/25/2003	Welte et al.	
	TR-207	US- 20030130335	07/10/2003	Mjalli et al.	
	TR-208	US- 20030215899	11/20/2003	Meng et al.	
	TR-209	US- 20030217379	11/20/2003	Kennedy et al.	
	TR-210	US-20030194745	10/16/2003	McDowell et al.	

FOREIGN PATENT DOCUMENTS

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Sheet 2 of 20

Complete if Known	
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Art Unit	1615
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Attorney Docket Number	TTP 2002-07

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	TR-211	US- 20040009946	01/15/2004	Lewis et al.	
	TR-212	US- 20040009956	01/15/2004	Pei et al.	
	TR-213	US- 20040014778	01/22/2004	Mjalli et al.	
	TR-214	US- 20040023974	02/05/2004	Coppola et al.	
	TR-215	US- 20040121353	06/24/2004	Lewis et al.	
	TR-216	US- 20040127570	07/01/2004	Mayer et al.	
	TR-217	US- 20040138218	07/15/2004	Pallen et al.	
	TR-218	US- 20040147596	07/29/2004	Barr et al.	
	TR-219	US- 20040147755	07/29/2004	Malamas et al.	
	TR-220	US- 20040167188	08/26/2004	Zhili et al.	
	TR-221	US- 20040176330	09/09/2004	Dufresne et al.	

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Sheet 3 of 20

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Application Number	10/777,471
Filing Date	02/04/04
First Named Inventor	Adnan M.M. Mjalli
Art Unit	1615
Examiner Name	Unknown
Attorney Docket Number	TTP 2002-07

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	TR-163	US- 5,348,969	09/20/1994	Romine et al	
	TR-164	US- 6,169,087	01/02/2001	Andersen et al.	
	TR-165	US- 6,174,874	01/16/2001	Wang et al.	
	TR-166	US- 6,214,564	04/10/2001	Rodan et al.	
	TR-167	US- 6,238,902	05/29/2001	Cheng et al.	
	TR-168	US- 6,262,069	01/17/2001	Crew et al.	
	TR-169	US- 6,388,076	05/14/2002	Mjalli et al.	
	TR-170	US- 6,365,592	04/02/2002	Leblanc et al.	
	TR-171	US- 6,410,556	06/25/2002	Andersen et al.	
	TR-172	US- 6,448,429	09/10/2002	Leblanc et al.	
	TR-173	US- 6,465,444	10/15/2002	Bayly et al.	
	TR-174	US- 6,472,545	10/29/2002	Liu et al.	
	TR-175	US- 6,486,141	11/26/2002	Lau et al.	
	TR-176	US- 6,486,142	11/26/2002	Leblanc et al.	
	TR-177	US- 6,498,151	12/24/2002	Li et al.	
	TR-178	US- 6,534,056	03/18/2003	Tromblay et al.	
	TR-179	US- 6,583,126	06/24/2003	Leblanc et al.	
	TR-180	US- 6,586,467	07/01/2003	Burgess et al.	
	TR-181	US- 6,596,772	07/22/2003	Huang et al.	
	TR-182	US- 6,605,753	08/12/2003	Kennedy et al.	

FOREIGN PATENT DOCUMENTS

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 4 of 20

Complete if Known	
Application Number	10/777,471
Filing Date	02/04/04
First Named Inventor	Adnan M.M. Mjalli
Art Unit	1615
Examiner Name	Unknown
Attorney Docket Number	TTP 2002-07

U.S. PATENT DOCUMENTS

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	TR-183	US- 6,613,903	09/02/2003	Andersen et al.	
	TR-184	US- 6,627,767	09/30/2003	Liu et al.	
	TR-185	US- 6,699,896	03/02/2004	Malamas et al.	
	TR-186	US- 6,765,021	07/20/2004	Butera et al.	
	TR-187	US- 6,770,466	08/03/2004	Shi et al.	
	TR-188	US- 6,777,433	08/17/2004	Leblanc et al.	
	TR-189	US- 6,784,205	08/31/2004	Barr et al.	
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 5 of 20

Complete if Known	
Application Number	10/777,421 ~~X~~ 471
Filing Date	02/04/04
First Named Inventor	Adnan M.M. Mjalli
Art Unit	1615
Examiner Name	Unknown
Attorney Docket Number	TTP 2002-07

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	TR-1	ANDERSEN HS, "2-(oxalylamino)-benzoic acid is a general, competitive inhibitor of protein-tyrosine phosphatases." The Journal of Biological Chemistry, 275:7101-7108 (2000)	
	TR-2	MURTHY VS, "3D-QSAR CoMFA and CoMSIA on Protein Tyrosine Phosphatase 1B Inhibitors" Bioorganic & Medicinal Chemistry, 10:2267-2282 (2002)	
	TR-3	MOK A, "A single nucleotide polymorphism in protein tyrosine phosphatase PTP-1B is associated with protection from diabetes or impaired glucose Tolerance in Oji-Cree" The Journal of Clinical Endocrinology & Metabolism, 87(2): 724-727 (2002)	
	TR-4	SHEN K, "Acquisition of a specific and potent PTP1B inhibitor from a novel combinatorial library and screening procedure." The Journal of Biological Chemistry, 276:47311-47319 (2001)	
	TR-5	COVIC L, "Activation and inhibition of G protein-coupled receptors by cell-penetrating membrane-tethered peptides." Proceedings of the National Academy of Sciences, 99:643-648 (2002)	
	TR-6	LIU DG, "Acylsulfonamide-containing PTP1B inhibitors designed to mimic an enzyme-bound water of hydration." Bioorganic & Medicinal Chemistry Letters, 13:3005-3007 (2003)	
	TR-7	WIESMANN C, "Allosteric inhibition of protein tyrosine phosphatase 1B" Nature Structural & Molecular Biology, 11:730-737 (2004)	
	TR-8	LI X, "Alpha,alpha-difluoro-beta-ketophosphonates as potent inhibitors of protein tyrosine phosphatase 1B." Bioorganic & Medicinal Chemistry Letters, 14:4301-4306 (2004)	
	TR-9	ARABACI G, "alpha-bromoacetophenone derivatives as neutral protein tyrosine phosphatase inhibitors: structure-Activity relationship." Bioorganic & Medicinal Chemistry Letters, 12:3047-3050 (2002)	
	TR-10	CHO KJ, "Alpha-lipoic acid decreases thiol reactivity of the insulin receptor and protein tyrosine phosphatase 1B in 3T3-L1 adipocytes." Biochemical Pharmacology, 66:849-858 (2003)	
	TR-11	AHMAD F, "Alterations in skeletal muscle protein-tyrosine phosphatase activity and expression in insulin-resistant human obesity and diabetes." Journal of Clinical Investigation, 100:449-458 (1997)	

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Attorney Docket Number	TTP 2002-07

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Examiner Initials *	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	TR-12	WANG WQ, "An overview of the protein tyrosine phosphatase superfamily." Current Topics in Medicinal Chemistry, 3:739-748 (2003)	
	TR-13	GUM RJ, "Antisense Protein Tyrosine Phosphatase 1B Reverses Activation of p38 Mitogen-Activated Protein Kinase in Liver of ob/ob Mice." Molecular Endocrinology, 17:1131-1143 (2003)	
	TR-14	VETTER SW, "Assessment of protein-tyrosine phosphatase 1B substrate specificity using "inverse alanine scanning"." The Journal of Biological Chemistry, 275:2265-2268 (2000)	
	TR-15	PATANI G. "Bioisosterism: A Rational Approach in Drug Design." Chemical Review, 96, 3147-3176 (1996)	
	TR-16	LEE K, "CD45 protein-tyrosine phosphatase inhibitor development." Current Topics in Medicinal Chemistry, 3:797-807 (2003)	
	TR-17	IRIE-SASAKI J, "CD45 regulated signaling pathways." Current Topics in Medicinal Chemistry, 3:783-996 (2003)	
	TR-18	CHU W, "Cell-free Synthesis of Preparative Amounts of Enzymatically Active Human PTP1B" Biochemica, 2:28-29 (2001)	
	TR-19	XIE L, "Cellular effects of small molecule PTP1B inhibitors on insulin signaling." Biochemistry, 42:12792-12804 (2003)	
	TR-20	TAYLOR WP, "Charged with meaning: the structure and mechanism of phosphoprotein phosphatases." Chemistry & Biology, 2:713-718 (1995)	
	TR-21	PATANKAR SJ, "Classification of Inhibitors of Protein Tyrosine Phosphatase 1B Using Molecular Structure Based Descriptors " Journal of Chemical Information and Computer Sciences, 43:885-899 (2003)	
	TR-22	SUN JP, "Crystal structure of PTP1B complexed with a potent and selective bidentate inhibitor." The Journal of Biological Chemistry, 278:12406-12414 (2003)	
	TR-23	DATABASE CAPLUS 'Online! CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; retrieved from STN accession no. 62:29663 Database accession no. 1965:29663 RNs 805-66-3 and 810-22-0 abstract & PYL T ET AL: ANN., 1964, Page 679	
	TR-24	YAN Z, "Design and synthesis of phosphotyrosine mimetics." Bioorganic & Medicinal Chemistry Letters, 13:2083-2085 (2003)	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 7 of 20

Complete if Known	
Application Number	10/777,471
Filing Date	02/04/04
First Named Inventor	Adnan M.M. Mjalli
Art Unit	1615
Examiner Name	Unknown
Attorney Docket Number	TTP 2002-07

NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	TR-25	ANDERSEN HS, "Discovery and SAR of a novel selective and orally bioavailable nonpeptide classical competitive inhibitor class of protein-tyrosine phosphatase 1B." Journal of Medicinal Chemistry, 45:4443-4459 (2002)	
	TR-26	PEI Z, "Discovery and SAR of novel, potent and selective protein tyrosine phosphatase 1B inhibitors." Bioorganic & Medicinal Chemistry Letters, 13:3129-3132 (2003)	
	TR-27	LIU G, "Discovery and structure-activity relationship of oxalylarylaminobenzoic acids as inhibitors of protein tyrosine phosphatase 1B." Journal of Medicinal Chemistry, 46:2093-2103 (2003)	
	TR-28	ERLANSON DA, "Discovery of a New Phosphotyrosine Mimetic for PTP1B Using Breakaway Tethering" Journal of the American Chemical Society, 125:5602-5603 (2003)	
	TR-29	HYAE GYEONG CHEON, "Discovery of a novel protein tyrosine phosphatase-1B inhibitor, KR61639: potential development as an antihyperglycemic agent" European Journal of Pharmacology, 485:333-339 (2004)	
	TR-30	OCKEY DA, "Discovery of novel PTP1b inhibitors " Bioorganic & Medicinal Chemistry Letters, 14:389-391 (2004)	
	TR-31	CHEN YT, "Divalent and trivalent alpha-ketocarboxylic acids as inhibitors of protein tyrosine phosphatases." Journal of Medicinal Chemistry, 45:3946-3952 (2002)	
	TR-32	BOUTE N, "Dynamics of the interaction between the insulin receptor and protein tyrosine-phosphatase 1B in living cells." EMBO Reports, 4:313-319 (2003)	
	TR-33	PETRONE A, "Emerging issues in receptor protein tyrosine phosphatase function: lifting fog or simply shifting?" Journal of Cell Science, 113:2345-2354 (2000)	
	TR-34	PETERS GH, "Enzyme kinetic characterization of protein tyrosine phosphatases" Biochimie, 85:527-534 (2003)	
	TR-35	SHRESTHA S, "Evans Blue and other dyes as protein tyrosine phosphatase inhibitors." Bioorganic & Medicinal Chemistry Letters, 14:1923-1926 (2004)	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 8 of 20

Complete if Known	
Application Number	10/777,~~481~~ 471
Filing Date	02/04/04
First Named Inventor	Adnan M.M. Mjalli
Art Unit	1615
Examiner Name	Unknown
Attorney Docket Number	TTP 2002-07

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	TR-36	CROSS KP, "Finding discriminating structural features by reassembling common building blocks." Journal of Medicinal Chemistry, 46:4770-4775 (2003)	
	TR-37	WANG Q, "Fluorescein monophosphates as fluorogenic substrates for protein tyrosine phosphatases." Biochimica Et Biophysica Acta, 1431:14-23 (1999)	
	TR-38	SHIM YS, "Formylchromone derivatives as a novel class of protein tyrosine phosphatase 1B inhibitors." Bioorganic & Medicinal Chemistry Letters, 13:2561-2563 (2003)	
	TR-39	LIU G, "Fragment screening and assembly: a highly efficient approach to a selective and cell active protein tyrosine phosphatase 1B inhibitor." Journal of Medicinal Chemistry, 46:4232-4235 (2003)	
	TR-40	ROMSICKI Y, "Functional characterization and crystal structure of the C215D mutant of protein-tyrosine phosphatase-1B." The Journal of Biological Chemistry, 278:29009-15 (2003)	
	TR-41	PHAN J, "High-Resolution Structure of the Yersinia pestis Protein Tyrosine Phosphatase YopH in Complex with a Phosphotyrosyl Mimetic-Containing Hexapeptide." Biochemistry, 42:13113-13121 (2003)	
	TR-42	XIN Z, "Identification of a monoacid-Based, cell permeable, selective inhibitor of protein tyrosine phosphatase 1B " Bioorganic & Medicinal Chemistry Letters, 13:3947-3950 (2003)	
	TR-43	PUIUS YA, "Identification of a second aryl phosphate-binding site in protein-tyrosine phosphatase 1B: a paradigm for inhibitor design." Proceedings of the National Academy of Sciences, 94:13420-13425 (1997)	
	TR-44	FUKADA T, "Identification of YB-1 as a regulator of PTP1B expression: implications for regulation of insulin and cytokine signaling." The EMBO Journal, 22:479-493 (2003)	
	TR-45	ELCHEBLY M, "Increased insulin sensitivity and obesity resistance in mice lacking the protein tyrosine phosphatase-1B gene." Science, 283:1544-1548 (1999)	
	TR-46	ZABELL AP, "Inhibition studies with rationally designed inhibitors of the human low molecular weight protein tyrosine phosphatase." Bioorganic & Medicinal Chemistry, 12:1867-1880 (2004)	

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Sheet 9 of 20

Complete if Known	
Application Number	10/777,471
Filing Date	02/04/04
First Named Inventor	Adnan M.M. Mjalli
Art Unit	1615
Examiner Name	Unknown
Attorney Docket Number	TTP 2002-07

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	TR-47	TAYLOR SD, "Inhibitors of protein tyrosine phosphatase 1B (PTP1B)." Current Topics in Medicinal Chemistry, 3:759-782 (2003)	
	TR-48	TAO J, "Insulin stimulates tyrosine phosphorylation and inactivation of protein-tyrosine phosphatase 1B in vivo." The Journal of Biological Chemistry, 276:29520-29525 (2001)	
	TR-49	DADKE S, "Interaction of protein tyrosine phosphatase (PTP) 1B with its substrates is influenced by two distinct binding domains." Biochemical Journal, 364:377-383 (2002)	
	TR-50	International Search Report for related PCT application PCT/US04/004076 mailed August 24, 2004.	
	TR-51	BLANCHETOT C, "Intra- and intermolecular interactions between intracellular domains of receptor protein-tyrosine phosphatases." The Journal of Biological Chemistry, 277:47263-47269 (2002)	
	TR-52	HAASE H, "Intracellular zinc fluctuations modulate protein tyrosine phosphatase activity in insulin/insulin-like growth factor-1 signaling." Experimental Cell Research, 291:289-298 (2003)	
	TR-53	LILJEBRIS C, "Investigation of potential bioisosteric replacements for the carboxyl groups of peptidomimetic inhibitors of protein tyrosine phosphatase 1B: identification of a tetrazole-containing inhibitor with cellular activity." Journal of Medicinal Chemistry, 45:1785-1798 (2002)	
	TR-54	FRIMURER TM, "Ligand-induced conformational changes: improved predictions of ligand binding conformations and affinities." Biophysical Journal, 84:2273-2281 (2003)	
	TR-55	TJERNBERG A, "Mechanism of action of pyridazine analogues on protein tyrosine phosphatase 1B (PTP1B)" Bioorganic & Medicinal Chemistry Letters, 14:891-895 (2004)	
	TR-56	LARSEN SD, "Modification of the N-terminus of peptidomimetic protein tyrosine phosphatase 1B (PTP1B) inhibitors: identification of analogues with cellular activity." Bioorganic & Medicinal Chemistry Letters, 13:971-975 (2003)	
	TR-57	SALMEEN A, "Molecular basis for the dephosphorylation of the activation segment of the insulin receptor by protein tyrosine phosphatase 1B." Molecular Cell, 6:1401-1412 (2000)	
	TR-58	UMEZAWA K, "Molecular design and biological activities of protein-tyrosine phosphatase inhibitors." Pharmacology & Therapeutics, 99:15-24 (2003)	

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Sheet 10 of 20

Complete if Known	
Application Number	10/777,471
Filing Date	02/04/04
First Named Inventor	Adnan M.M. Mjalli
Art Unit	1615
Examiner Name	Unknown
Attorney Docket Number	TTP 2002-07

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	TR-59	DOMAN TN, "Molecular docking and high-throughput screening for novel inhibitors of protein tyrosine phosphatase-1B." Journal of Medicinal Chemistry, 45:2213-2221 (2002)	
	TR-60	PETERS GH, "Molecular dynamics simulations of protein-tyrosine phosphatase 1B. I. ligand-induced changes in the protein motions." Biophysical Journal, 77:505-515 (1999)	
	TR-61	PETERS GH, "Molecular dynamics simulations of protein-tyrosine phosphatase 1B. II. substrate-enzyme interactions and dynamics." Biophysical Journal, 78:2191-2200 (2000)	
	TR-62	MALAMAS MS, "New azolidinediones as inhibitors of protein tyrosine phosphatase 1B with antihyperglycemic properties." Journal of Medicinal Chemistry, 43:995-1010 (2000)	
	TR-63	MALAMAS MS, "Novel benzofuran and benzothiophene biphenyls as inhibitors of protein tyrosine phosphatase 1B with antihyperglycemic properties." Journal of Medicinal Chemistry, 43:1293-1310 (2000)	
	TR-64	GLOVER NR, "Nuclear magnetic resonance and restrained molecular dynamics studies of the interaction of an epidermal growth factor-derived peptide with protein tyrosine phosphatase 1B." Biochemistry, 38:5256-5271 (1999)	
	TR-65	LILJEBRIS C, "Oxidation of protein tyrosine phosphatases as a pharmaceutical mechanism of action: a study using 4-hydroxy-3,3-dimethyl-2H-benzo[g]indole-2,5(3H)-dione." The Journal of Pharmacology & Experimental Therapeutics, 309:711-719 (2004)	
	TR-66	VAN MONTFORT RL, "Oxidation state of the active-site cysteine in protein tyrosine phosphatase 1B." Nature, 423:773-777 (2003)	
	TR-67	CHEN YT, "Parallel synthesis of a library of bidentate protein tyrosine phosphatase inhibitors based on the alpha-ketoacid motif." Bioorganic & Medicinal Chemistry, 12:3289-3298 (2004)	
	TR-68	CHEN YT, "Peptidic alpha-Ketocarboxylic Acids and Sulfonamides as Inhibitors of Protein Tyrosine Phosphatases." Journal of Organic Chemistry, 68:4123-4125 (2003)	
	TR-69	TAING M, "Potent and highly selective inhibitors of the protein tyrosine phosphatase 1B" Biochemistry, 38:3793-3803 (1999)	

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Sheet 11 of 20

Complete if Known	
Application Number	10/777,421 ~~X~~ 471
Filing Date	02/04/04
First Named Inventor	Adnan M.M. Mjalli
Art Unit	1615
Examiner Name	Unknown
Attorney Docket Number	TTP 2002-07

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	TR-70	URBANEK, "Potent Reversible Inhibitors of the Protein Tyrosien Phosphatase CD45" Journal of Medical Chemistry, 44: 1777-1793 (2001)	
	TR-71	XIN Z, "Potent, selective inhibitors of protein tyrosine phosphatase 1B." Bioorganic & Medicinal Chemistry Letters, 13:1887-1890 (2003)	
	TR-72	GUO XL, "Probing the molecular basis for potent and selective protein-tyrosine phosphatase 1B inhibition." The Journal of Biological Chemistry, 277:41014-41022 (2002)	
	TR-73	HOOFT VAN HUIJSDUIJNEN R, "Prospects for inhibitors of protein tyrosine phosphatase 1B as antidiabetic drugs." Journal of Medicinal Chemistry, 47:4142-4146 (2004)	
	TR-74	LIU G, "Protein tyrosine phosphatase 1B inhibition: opportunities and challenges." Current Medicinal Chemistry, 10:1407-1421 (2003)	
	TR-75	JOHNSON TO, "Protein tyrosine phosphatase 1B inhibitors for diabetes" Nature Reviews Drug Discovery, 1:696-709 (2002)	
	TR-76	RONDINONE CM, "Protein tyrosine phosphatase 1B reduction regulates adiposity and expression of genes involved in lipogenesis." Diabetes, 51:2405-2411 (2002)	
	TR-77	RAMACHANDRAN C, "Protein tyrosine phosphatase 1B: a novel target for type 2 diabetes and obesity." Current Topics in Medicinal Chemistry, 3:749-757 (2003)	
	TR-78	ROMSICKI Y, "Protein Tyrosine Phosphatase-1B Dephosphorylation of the Insulin Receptor Occurs in a Perinuclear Endosome Compartment in Human Embryonic Kidney 293 Cells." The Journal of Biological Chemistry, 279:12868-12875 (2004)	
	TR-79	WU ZL, "Protein tyrosine phosphatases are up-regulated and participate in cell death induced by polyglutamine expansion." The Journal of Biological Chemistry, 277:44208-44213 (2002)	
	TR-80	ALONSO A, "Protein tyrosine phosphatases in the human genome." Cell, 117:699-711 (2004)	
	TR-81	ZHANG ZY, "PROTEIN TYROSINE PHOSPHATASES: Structure and Function, Substrate Specificity, and Inhibitor Development" Annual Review of Pharmacology and Toxicology, 42:209-234 (2002)	

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Sheet 12 of 20

Complete if Known	
Application Number	10/777,431
Filing Date	02/04/04
First Named Inventor	Adnan M.M. Mjalli
Art Unit	1615
Examiner Name	Unknown
Attorney Docket Number	TTP 2002-07

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	TR-82	GOLDSTEIN BJ, "Protein-tyrosine phosphatase 1B (PTP1B): a novel therapeutic target for type 2 diabetes mellitus, obesity and related states of insulin resistance." Current Drug Targets - Immune, Endocrine & Metabolic Disorders, 1:265-275 (2001)	
	TR-83	DADKE S; CHERNOFF J, "Protein-Tyrosine Phosphatase 1B as a Potential Drug Target for Obesity" Current Drug Targets - Immune, Endocrine & Metabolic Disorders, 3:299-304 (2003)	
	TR-84	SHIMIZU S, "Protein-tyrosine Phosphatase 1B as New Activator for Hepatic Lipogenesis via Sterol Regulatory Element-binding Protein-1 Gene Expression." The Journal of Biological Chemistry, 278:43095-43101 (2003)	
	TR-85	DADKE S, "Protein-tyrosine phosphatase 1B mediates the effects of insulin on the actin cytoskeleton in immortalized fibroblasts." The Journal of Biological Chemistry, 278:40607-40611 (2003)	
	TR-86	GOLDSTEIN BJ, "Protein-tyrosine phosphatases: emerging targets for therapeutic intervention in type 2 diabetes and related states of insulin resistance" The Journal of Clinical Endocrinology & Metabolism, 87:2474-2480 (2002)	
	TR-87	HUNDAHL MOLLER N.P. et al: "Protein Tyrosine Phosphatases (PTPs) as Drug Targets: Inhibitors of PTP-1B for the Treatment of Diabetes: CURRENT OPINION IN DRUG DISCOVERY AND DEVELOPMENT, CURRENT DRUGS, LONDON, GB, vol. 3, pages 527-540 (2000)	
	TR-88	ZINKER BA, "PTP1B antisense oligonucleotide lowers PTP1B protein, normalizes blood glucose, and improves insulin sensitivity in diabetic mice." Proceedings of the National Academy of Sciences, 99:11357-11362 (2002)	
	TR-89	WARING JF, "PTP1B antisense-treated mice show regulation of genes involved in lipogenesis in liver and fat." Molecular and Cellular Endocrinology, 203:155-168 (2003)	
	TR-90	TONKS NK, "PTP1B: from the sidelines to the front lines" FEBS Letters, 546:140-148 (2003)	
	TR-91	ROMSICKI Y, "Purification and characterization of T cell protein tyrosine phosphatase reveals significant functional homology to protein tyrosine phosphatase-1B." Archives of Biochemistry and Biophysics, 414:40-50 (2003)	
	TR-92	SALMEEN A, "Redox regulation of protein tyrosine phosphatase 1B involves a sulphenyl-amide intermediate." Nature, 423:769-773 (2003)	
	TR-93	GUM RJ, "Reduction of protein tyrosine phosphatase 1B increases insulin-dependent signaling in ob/ob mice." Diabetes, 52:21-28 (2003)	

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Sheet 13 of 20

Complete if Known	
Application Number	10/777,421
Filing Date	02/04/04
First Named Inventor	Adnan M.M. Mjalli
Art Unit	1615
Examiner Name	Unknown
Attorney Docket Number	TTP 2002-07

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	TR-94	GALIC S, "Regulation of insulin receptor signaling by the protein tyrosine phosphatase TCPTP." Molecular And Cellular Biology, 23:2096-2108 (2003)	
	TR-95	HAJ FG, "Regulation of receptor tyrosine kinase signaling by protein tyrosine phosphatase-1B." The Journal of Biological Chemistry, 278:739-44 (2003)	
	TR-96	PETERS GH, "Residue 259 is a key determinant of substrate specificity of protein-tyrosine phosphatases 1B and alpha." The Journal of Biological Chemistry, 275:18201-18209 (2000)	
	TR-97	LIU G, "Selective protein tyrosine phosphatase 1B inhibitors: targeting the second phosphotyrosine binding site with non-carboxylic acid-containing ligands." Journal of Medicinal Chemistry, 46:3437-3440 (2003)	
	TR-98	MILARSKI KL, "Sequence specificity in recognition of the epidermal growth factor receptor by protein tyrosine phosphatase 1B." The Journal of Biological Chemistry, 268:23634-23639 (1993)	
	TR-99	HALAZY S, "Signal Transduction: An Exciting Field of Investigation for Small Molecule Drug Discovery" Molecules, 8:349-358 (2003)	
	TR-100	BLEASDALE JE, "Small molecule peptidomimetics containing a novel phosphotyrosine bioisostere inhibit protein tyrosine phosphatase 1B and augment insulin action." Biochemistry, 40:5642-5654 (2001)	
	TR-101	XIE J, "Squaric Acids: A New Motif for Designing Inhibitors of Protein Tyrosine Phosphatases " Organic Letters, 6:83-86 (2004)	
	TR-102	DILLET V, "Stabilization of Charges and Protonation States in the Active Site of the Protein Tyrosine Phosphatases: A Computational Study" Journal of Physical Chemistry B, 104:11321-11333 (2000)	
	TR-103	IVERSEN LF, "Steric hindrance as a basis for structure-based design of selective inhibitors of protein-tyrosine phosphatases." Biochemistry, 40:14812-14820 (2001)	
	TR-104	ANDERSEN JN, "Structural and evolutionary relationships among protein tyrosine phosphatase domains." Molecular And Cellular Biology, 21:7117-7136 (2001)	

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Sheet 14 of 20

Complete if Known	
Application Number	10/777,487
Filing Date	02/04/04
First Named Inventor	Adnan M.M. Mjalli
Art Unit	1615
Examiner Name	Unknown
Attorney Docket Number	TTP 2002-07

NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	TR-105	GROVES M, "Structural Basis for Inhibition of the Protein Tyrosine Phosphatase 1B by Phosphotyrosine Peptide Mimetics" Biochemistry, 37:17773-17783 (1998)	
	TR-106	SARMIENTO M, "Structural basis of plasticity in protein tyrosine phosphatase 1B substrate recognition" Biochemistry, 39:8171-8179 (2000)	
	TR-107	LAU C, "Structure based design of a series of potent and selective non peptidic PTP-1B inhibitors" Bioorganic & Medicinal Chem. Letters, 14: 1043-4048 (2004)	
	TR-108	VERSEN LF, "Structure determination of T cell protein-tyrosine phosphatase." The Journal of Biological Chemistry, 277:19982-19990 (2002)	
	TR-109	JIA Z, "Structure of protein tyrosine phosphatase 1B in complex with inhibitors bearing two phosphotyrosine mimetics." Journal of Medicinal Chemistry, 44:4584-4594 (2001)	
	TR-110	IVERSEN LF, "Structure-based design of a low molecular weight, nonphosphorus, nonpeptide, and highly selective inhibitor of protein-tyrosine phosphatase 1B." The Journal of Biological Chemistry, 275:10300-10307 (2000)	
	TR-111	LUND IK, "Structure-based design of selective and potent inhibitors of protein-tyrosine phosphatase beta." The Journal of Biological Chemistry, 279:24226-24235 (2004)	
	TR-112	SARMIENTO M, "Structure-based discovery of small molecule inhibitors targeted to protein tyrosine phosphatase 1B." Journal of Medicinal Chemistry, 43:146-155 (2000)	
	TR-113	WANG J, "Structure-based Prediction of Free Energy Changes of binding of PTP1B Inhibitors" Journal of Computer-Aided Molecular Design, 17:495-513 (2003)	
	TR-114	MCCAIN DF, "Suramin derivatives as inhibitors and activators of protein-tyrosine phosphatases." The Journal of Biological Chemistry, 279:14713-14725 (2004)	
	TR-115	LILJEBRIS C, "Synthesis and biological activity of a novel class of pyridazine analogues as non-competitive reversible inhibitors of protein tyrosine phosphatase 1B (PTP1B)." Bioorganic & Medicinal Chemistry, 10:3197-3212 (2002)	
	TR-116	LARSEN SD, "Synthesis and biological activity of a novel class of small molecular weight peptidomimetic competitive inhibitors of protein tyrosine phosphatase 1B" Journal of Medicinal Chemistry, 45:598-622 (2002)	
	TR-117	THERIEN M, "Synthesis of a novel peptidic photoaffinity probe for the PTP-1B enzyme." Bioorganic & Medicinal Chemistry Letters, 14:2319-2322 (2004)	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 15 of 20

Complete if Known	
Application Number	10/777,471
Filing Date	02/04/04
First Named Inventor	Adnan M.M. Mjalli
Art Unit	1615
Examiner Name	Unknown
Attorney Docket Number	TTP 2002-07

NON PATENT LITERATURE DOCUMENTS

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	TR-118	DUFRESNE C, "The development of potent non-peptidic PTP-1B inhibitors." Bioorganic & Medicinal Chemistry Letters, 14:1039-1042 (2004)	
	TR-119	LEUNG C, "The difluoromethylenesulfonic acid group as a monoanionic phosphate surrogate for obtaining PTP1B inhibitors." Bioorganic & Medicinal Chemistry, 10:2309-2323 (2002)	
	TR-120	MOONEY RA, "The leukocyte common antigen-related protein LAR: candidate PTP for inhibitory targeting." Current Topics in Medicinal Chemistry, 3:809-819 (2003)	
	TR-121	WASSERMAN et al., "The Oxazole-triamide Rearrangement. Application to Pepide Synthesis" TETRAHEDRON LETTERS, vol. 23, no. 37, pages 3831-3834 (1982)	
	TR-122	TIGANIS T, "The protein-tyrosine phosphatase TCPTP regulates epidermal growth factor receptor-mediated and phosphatidylinositol 3-kinase-dependent signaling." The Journal of Biological Chemistry, 274:27768-27775 (1999)	
	TR-123	WIDLANSKI TS, "The road less travelled: taming phosphatases." Chemistry & Biology, 4:489-492 (1997)	
	TR-124	DUBE N, "The role of protein tyrosine phosphatase 1B in Ras signaling." Proceedings of the National Academy of Sciences, 101:1834-1839 (2004)	
	TR-125	ESPANEL X, "The SPOT technique as a tool for studying protein tyrosine phosphatase substrate specificities." Protein Science, 11:2326-2334 (2002)	
	TR-126	SCAPIN G, "The structural basis for the selectivity of benzotriazole inhibitors of PTP1B." Biochemistry, 42:11451-11459 (2003)	
	TR-127	ASANTE-APPIAH E, "The structure of PTP-1B in complex with a peptide inhibitor reveals an alternative binding mode for bisphosphonates." Biochemistry, 41:9043-9051 (2002)	
	TR-128	BUKCZYNSKA P, "The T-cell protein tyrosine phosphatase is phosphorylated on Ser-304 by cyclin-dependent protein kinases in mitosis." Biochemical Journal, 380:939-949 (2004)	
	TR-129	RAGAB A, "The tyrosine phosphatase 1B regulates linker for activation of T-cell phosphorylation and platelet aggregation upon FcgammaRIIa cross-linking." The Journal of Biological Chemistry, 278:40923-40932 (2003)	

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Sheet 16 of 20

Complete if Known	
Application Number	10/777,471
Filing Date	02/04/04
First Named Inventor	Adnan M.M. Mjalli
Art Unit	1615
Examiner Name	Unknown
Attorney Docket Number	TTP 2002-07

NON PATENT LITERATURE DOCUMENTS			
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	TR-130	ZABOLOTNY JM, "Transgenic Overexpression of Protein-tyrosine Phosphatase 1B in Muscle Causes Insulin Resistance, but Overexpression with Leukocyte Antigen-related Phosphatase Does Not Additively Impair Insulin Action." The Journal of Biological Chemistry, 279:24844-24851 (2004)	
	TR-131	LEE K, "Tripeptide inhibitors of Yersinia protein-tyrosine phosphatase." Bioorganic & Medicinal Chemistry Letters, 13:2577-2581 (2003)	
	TR-132	SIMS C, "Tyrosine phosphatase inhibitors selectively antagonize beta-adrenergic receptor-dependent regulation of cardiac ion channels." Molecular Pharmacology, 58:1213-1221 (2000)	
	TR-133	ZHU L, "Use of an Anaerobic Chamber Environment for the Assay of Endogenous Cellular Protein-Tyrosine Phosphatase Activities." Biological Procedures Online, 4:1-9 (2002)	

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Sheet 17 of 20

Complete if Known	
Application Number	10/777,471
Filing Date	02-04-04
First Named Inventor	Adnan M. M. Mjalli
Art Unit	1615
Examiner Name	Unknown
Attorney Docket Number	TTP 2002-07

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Examiner Initials *	Cite No.[1]	Document Number Number - Kind Code[2] (*if known*)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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	TR-134	EP 01019364	06/09/04	Larsen et al.		

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Sheet 18 of 20

Complete if Known	
Application Number	10/777,421 ~~X~~ 471
Filing Date	02/04/04
First Named Inventor	Adnan M.M. Mjalli
Art Unit	1615
Examiner Name	Unkown
Attorney Docket Number	TTP 2002-07

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	TR-135	WO 97/40017	10/30/97	Anderson et al.		
	TR-136	WO 99/02505	01/21/99	LaCrampe et al.		
	TR-137	WO 99/11658	03/11/99	Liebeschuetz et al.		
	TR-138	WO 99/46244	09/16/99	Jeppesen et al.		
	TR-139	WO 99/65942	12/23/99	Gordon et al.		
	TR-140	WO 00/76971	12/21/00	Jones et al.		
	TR-141	WO 01/26656	04/19/01	Chabrier de Lassauniere et al.		
	TR-142	WO 02/010140	02/07/02	Thurieau et al.		
	TR-143	WO 02/04412	01/17/02	Burgess et al.		
	TR-144	WO 02/04459	01/17/02	Anderson et al.		

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 19 of 20

Complete if Known	
Application Number	10/777,4~~2~~ 431
Filing Date	02/04/04
First Named Inventor	Adnan M.M. Mjalli
Art Unit	1615
Examiner Name	Unkown
Attorney Docket Number	TTP 2002-07

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	TR-145	WO 03/020688	03/13/03	Liu et al.		
	TR-146	WO 03/033496	04/24/03	Mjalli et al.		
	TR-147	WO 03/041729	05/22/03	Zhang et al.		
	TR-148	WO 03/048140	06/12/03	Inaba et al.		
	TR-149	WO 03/064376	08/07/03	Swinnen et al.		
	TR-150	WO 03/072537	09/04/03	Szezepanklewicz et al.		
	TR-151	WO 03/073987	09/12/03	Barr et al.		
	TR-152	WO 03/082841	10/09/03	Coppola et al.		
	TR-153	WO 03/092679	11/13/03	Groneberg et al.		

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Attorney Docket Number	TTP 2002-07

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No.[1]	Document Number Number - Kind Code[2] (*if known*)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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FOREIGN PATENT DOCUMENTS

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	TR-154	WO 03/093498	11/13/03	Pei et al.		
	TR-155	WO 04/014415	02/19/04	Zheng et al.		
	TR-156	WO 04/020466	03/11/04	Hooft et al.		
	TR-157	WO 04/041799	05/21/04	Birch et al.		
	TR-158	WO 04/050646	06/17/04	Kenny et al.		
	TR-159	WO 04/071447	08/26/04	Mjalli et al.		
	TR-160	WO 04/071448	08/26/04	Mjalli et al.		
	TR-161	WO 04/074238	09/02/04	Gray et al.		
	TR-162	WO 04/074256	09/02/04	Klopfenstein et al.		

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